



YOUR COMPLETE SOURCE FOR ELECTRIC WELDED STEEL TUBULAR PRODUCTS
ASTM A53 STANDARD ERW PIPE

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THEORETICAL WEIGHT PER FOOT FACTORS																								
Outside Diameter Decimal	NPS PIPE SIZE	Nominal Wall Thickness																			SCH 60	SCH 80	SCH 120	
		SCH 20		SCH 30		SCH 40																		
		.156	.188	.203	.219	.237	.250	.258	.277	.279	.280	.281	.307	.312	.322	.330	.337	.344	.365	.375				.406
4.500	4	7.24	8.67	9.32	10.02	10.80	11.36	11.70	12.50	12.59	12.63	12.67	13.76	13.97	14.38	14.71	15.00							
5.563	5		10.80	11.63	12.51	13.49	14.20	14.63	15.65	15.76	15.81	15.87	17.25	17.51	18.04	18.46	18.83	19.19	20.28	20.80	22.38	23.70	24.00	27.06
6.625	6		12.94	13.94	15.00	16.18	17.04	17.56	18.80	18.93	18.99	19.06	20.73	21.06	21.70	22.21	22.65	23.10	24.43	25.05	26.99	28.60	28.97	32.74
8.625	8				19.68	21.25	22.38	23.08	24.72	24.89	24.98	25.06	27.30	27.73	28.58	29.26	29.86	30.45	32.23	33.07	35.67	37.84	38.33	43.43
10.750	10					28.06	28.94	31.01	31.23	31.34	31.45	34.27	34.81	35.90	36.76	37.51	38.27	40.52	41.59	44.89	47.65	48.28	54.79	
12.750	12					33.41	34.45	36.93	37.19	37.33	37.46	40.84	41.48	42.78	43.81	44.72	45.62	48.32	49.61	53.57	56.89	57.65	65.48	

TEST PRESSURE																										
Outside Diameter Decimal	NPS PIPE SIZE	Grade B Minimum psi																			STD	XS				
		.156	.188	.203	.219	.237	.250	.258	.277	.279	.280	.281	.307	.312	.322	.330	.337	.344	.365	.375			.406	.432	.438	.500
		4.000	4	1460	1750	1890	2040	2210	2330	2410	2590	2600	2610	2620	2800	2800	2800	2800	2800	2800			2800	2800		
5.563	5		1420	1530	1650	1790	1890	1950	2090	2110	2110	2120	2320	2360	2430	2490	2540	2600	2760	2800	2800	2800	2800	2800		
6.625	6		1190	1290	1390	1500	1580	1640	1760	1770	1780	1780	1950	1980	2040	2090	2140	2180	2310	2380	2570	2740	2780	2800		
8.625	8				1070	1150	1220	1260	1350	1360	1360	1370	1490	1520	1570	1610	1640	1680	1780	1830	1980	2100	2130	2430		
10.750	10					980	1010	1080	1090	1090	1100	1200	1220	1260	1290	1320	1340	1430	1470	1590	1690	1710	1950			
12.750	12					820	850	910	920	920	930	1010	1030	1060	1090	1110	1130	1200	1240	1340	1420	1440	1650			

TENSILE REQUIREMENTS	
ASTM A53	Grade B
Yield Strength, min. psi.	35,000
Tensile Strength, min. psi.	60,000
Elongation in 2 in. min. %	Refer to ASTM A53 Table x 4.1

Flattening Test	Position the weld at 0° and alternately at 90° to the direction of force and flatten until the OD is 2/3 of the original O.D. No cracks shall occur along the inside or outside surface of the weld .
Weight Tolerance	± 10% from its Specified Weight
Wall Thickness Tolerance	Shall not be more than 12.5% under nominal wall thickness
Outside Dimension Tolerances*	4.500" and larger ± 1.0% of spec. O.D.
*Measured at least 2" from the end of the pipe	
Note: Reference: ASTM A53 Latest.	

END FINISH	
Plain End: Ends beveled to angel of 30°, +5°, -0°	

Elongation in 2 Min																										
Outside Diameter Decimal	NPS PIPE SIZE	Grade B 1 1/2" Test Specimen																			STD	XS				
		.156	.188	.203	.219	.237	.250	.258	.277	.279	.280	.281	.307	.312	.322	.330	.337	.344	.365	.375			.406	.432	.438	.500
		4.000	4	23	24	25	25	26	26	26	26	26	26	26	27	27	27	27	27	27			27	28	28	29
5.563	5		24	25	25	26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	29	29	30		
6.625	6		24	25	25	26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	29	29	30		
8.625	8				25	26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	29	29	30		
10.750	10					26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	29	29	30		
12.750	12					26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	29	29	30		

The table is based on commonly used sizes. Maruichi Leavitt Pipe is produced in accordance with the mechanical and chemical property requirements of ASTM A53, Grade B



SUBMITTAL DATA FOR ASTM A53 STANDARD ERW PIPE

Scope

This specification covers plain-end electric-resistance welded (ERW) Grade B steel pipe manufactured per ASTM A53, latest edition.

Method of Manufacture

The weld seam of ERW pipe shall be heat treated after welding to a minimum of 1600 °F so that no untempered martensite remains, or otherwise processed in such a manner that no untempered martensite remains. The hydrostatic test shall be applied, without leakage through the weld seam or the pipe body. Pipe shall be hydrostatically tested to the applicable pressure given in Table X2.2 of ASTM A53 for the indicated size.

Chemical Requirements Grade B Composition - Max %

Carbon	Manganese	Phosphorus	Sulfur	Copper	Nickel	Chromium	Molybdenum	Vanadium	Note: the total combination of the last 5 elements shall not exceed 1.00%
0.30	1.20	0.05	0.45	0.50	0.40	0.40	0.15	0.08	

Tensile Requirements ASTM A53 Grade B

Yield Strength, min 35,000. psi.	Tensile Strength, min 60,000. psi.	Elongation in 2 in. min. % Refer to Table X4.1
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Dimensions and Weights

Dimensions and weights shall be per ASTM A53 Table X2.2.

Lengths

Standard lengths shall be single or double random (21' or 42') with a tolerance of -0 / +2".

Non-Destructive Testing

The weld seam of each length of electric-resistance welded pipe NPS 2 [DN 50] or larger shall be tested with a nondestructive electric test in accordance with Practices E 213, E 273, E 309, or E 570. Imperfections in the weld seam that produce a signal greater than the acceptance limit signal given in Table 3 shall be considered a defect unless the pipe manufacturer can demonstrate that the imperfection does not reduce the effective wall thickness beyond 12.5 % of the specified wall thickness.

Frequency of Testing

One of each of the tests specified shall be made on test specimens taken from one length of pipe from each lot of each pipe size, a lot shall contain no more than one heat.

Product Marking

Product shall bear a continuous line stencil as follows: MARUICHI LEAVITT ASTM A53 GR-B ASME SA53 E Size Gauge Heat Date Hydrostatic Test PSI Made in USA

End Finish

Plain End: Ends beveled to angel of 30°, +5°, -0°

Submittal Information

Project	Engineer	Locations
Contractor	Specification Reference	Comments

This information is a summary of the provisions of ASTM Specification A53 and is correct as of the latest edition. The provisions of this submittal will be changed upon issuance of an update of the ASTM specification.